

STATUS: Pending

POLICY NUMBER: Waste-0015-NPD-R1

SUBJECT: RCRA Closure and Corrective Action Program Guide

AUTHORIZED: Brian C. Rockensuess, Commissioner

SUPERSEDES: Waste-0015-NPD

ISSUING OFFICE: Office of Land Quality

ORIGINALLY EFFECTIVE: December 9, 2022

RENEWED OR REVISED: NA

Disclaimer: This nonrule policy document (NPD) is being established by the Indiana Department of Environmental Management (IDEM) consistent with its authority under [IC 13-14-1-11.5](#). It is intended solely to provide guidance and shall be used in conjunction with applicable rules or laws. It does not replace applicable rules and laws, and if it conflicts with these rules or laws, the rules or laws shall control. Pursuant to [IC 13-14-1-11.5](#), this policy will be available for public inspection for at least 45 days prior to presentation to the appropriate State Environmental Board and may be put into effect by IDEM 30 days afterward. If the nonrule policy is presented to more than one board, it will be effective 30 days after presentation to the last. IDEM also will submit the policy to the Indiana Register for publication.

1.0 PURPOSE

The NPD provides guidance on implementing RCRA closure and corrective action at sites managing hazardous waste. The NPD serves as a supplement to the Risk-based Closure Guide (WASTE-0046-R2).

2.0 SCOPE

This NPD applies to the Office of Land Quality (OLQ), Permits Branch, Hazardous Waste Permit Section (HWPS).

3.0 SUMMARY

Hazardous waste generators/facilities may eventually stop generating or receiving waste for treatment, storage, or disposal. At that time, the owner or operator must either remove all accumulated waste in hazardous waste management units (units or HWMUs) at the facility or leave the waste in place while maintaining the units in such a way that ensures they will not pose an unacceptable future threat to human health and the environment. This is a RCRA closure.

Past and present activities at hazardous waste facilities have sometimes resulted in releases of hazardous waste and hazardous constituents into soil, groundwater, surface water, sediments, and air. Hazardous waste regulations mandate facilities to investigate and clean up, or remediate, these releases via RCRA corrective action.

4.0 DEFINITIONS

This section defines terms not found in [329 IAC 3.1](#) and 40 CFR 260.10, which define many terms used in this NPD.

- 4.1. "Agency" – The Indiana Department of Environmental Management (IDEM).
- 4.2. "Area of concern (AOC)" – An existing or historical unit or area which does not meet the definition of a solid waste management unit and could potentially produce unacceptable exposures or become a potential source of groundwater contamination.
- 4.3. "Clean closure" – Complete, unrestricted closure of a hazardous waste management facility or units, including the decontamination, treatment, and/or removal of all hazardous waste, hazardous waste constituents, hazardous constituents, leachate, contaminated run-on and run-off, hazardous waste decomposition products, containment system components, and contaminated soils (including groundwater) that pose a substantial present or potential threat to human health or the environment (40 CFR 264.111 and 40 CFR 265.111).
- 4.4. "Closure of a hazardous waste (RCRA) facility" – The action to secure the hazardous waste management facility or unit(s) in a manner which will protect human health and the environment in accordance with the closure plan requirements of 40 CFR 265 Subpart G and 40 CFR 264 Subpart G.
- 4.5. "Closure in-place" – Leaving contamination in-place after closure and managing the unit as a landfill. At a minimum, the owner or operator of a facility that closes in-place must comply with the requirements for removing and/or stabilizing the waste, capping the hazardous waste management unit, develop and implement a groundwater monitoring plan, and provide a written post-closure plan subject to the IDEM approval.
- 4.6. "Closure via risk assessment" – Leaving any constituent of concern (exceeding IDEM's unconditional

remediation objective) in-place after closure and managing risks via institutional controls and/or engineered controls.

4.7. "Code of Federal Regulations (CFR)" - A codification of the general and permanent rules published in the Federal Register by the executive departments and agencies of the Federal Government.

4.8. "Corrective action agreed order" – An administrative order issued by the Agency (either unilaterally or on consent) to compel corrective action at a facility deemed necessary to protect human health or the environment.

4.9. "Corrective Measures Implementation Plan (CMIP)" – A plan to design, construct, operate, maintain, and monitor the performance of the corrective measure(s) selected for a facility.

4.10. "Corrective Measures Study (CMS)" – The development and evaluation of a corrective measure alternative or alternatives and recommendation of final corrective measure(s) for a facility.

4.11. "Environmental restrictive covenant (ERC)" – Any deed restriction, restrictive covenant, environmental covenant, environmental notice, or other restriction or obligation with respect to the land, as defined in [IC 13-11-2-193.5](#), which either: (1) Is executed before July 1, 2009, and: (A) Limits the use of the land; the activities which may be performed on or at the land; or requires the maintenance of any engineering control on the land designed to protect human health or the environment. (B) By its terms is intended to run with the land and be binding on successors. (C) Is recorded with the county recorder's office in the county in which the land is located. (D) Explains how it can be modified or terminated. (2) Is executed after June 30, 2009, and: (A) Limits the use of the land; the activities which may be performed on or at the land; or requires the maintenance of any engineering control on the land designed to protect human health or the environment. (B) By its terms is intended to run with the land and be binding on successors. (C) Is recorded with the county recorder's office in the county in which the land is located. (D) Explains how it can be modified or terminated. (E) Grants the department access to the land. (F) Requires notice to a transferee of either: (i) the land; (ii) an interest in the land; of the existence of the restrictive covenant. (G) Identifies the means by which the environmental files at the department which apply to the land can be located.

4.12. "Environmental restrictive ordinance" – As defined in [IC 13-11-2-71.2](#), any ordinance with respect to land, which: (1) Is adopted by a municipal corporation (as defined in [IC 36-1-2-10](#)). (2) Seeks to control the use of groundwater in a manner and to a degree which protects human health and the environment against unacceptable exposure to a release of hazardous substances or petroleum, or both.

4.13. "Hazardous waste" – Hazardous waste as defined in 40 CFR 261.3.

4.14. "Indiana Code (IC)" – The codification of laws enacted by the Indiana General Assembly that is maintained by the Indiana Legislative Council.

4.15. "Indiana Department of Environmental Management (IDEM)" – An agency of Indiana State Government whose mission is to implement federal and state regulations to protect human health and the environment while allowing the environmentally sound operations of industrial, agricultural, commercial, and government activities vital to a prosperous economy.

4.16. "Interim/Stabilization Measures (ISMs)" – ISMs may be required at any time during the corrective action process to control or abate threats to human health and/or the environment from releases and/or to prevent or minimize the further spread of contamination while long-term remedies are pursued.

4.17. "Partial closure" – The complete closure of a hazardous waste management unit, in accordance with the applicable closure requirements of 40 CFR Parts 264 and 265, at a facility that contains other active hazardous waste management units (i.e., the facility is considered partially closed).

4.18. "Published level" – A concentration published by IDEM for a chemical in a particular medium which is acceptable for a specific exposure scenario.

4.19. "Release-related chemical" – A substance placed on the land or in the subsurface which is, by virtue of its nature or quantity, subject to regulation by IDEM's Office of Land Quality. The term also includes regulated breakdown products.

4.20. "Remediation objective" – Per [IC 13-25-5-8.5\(c\)](#), either (1) a concentration of a substance equal to the naturally occurring concentration of that substance on the site, or (2) an environmental concentration of substance which; given the conditions, uses, and restrictions prevailing on the site; is protective of human health and the environment. For purposes of this document, a remediation objective may be a conditional remediation objective or an unconditional remediation objective.

4.21. "Remedy" – A means of reducing risk arising from a release-related chemical. Remedies either reduce the concentration of a release-related chemical, reduce exposure to that chemical, or both. An adequate remedy will, either by itself or in concert with one or more other remedies, reduce risk from release-related chemicals to an acceptable level.

4.22. "Resource Conservation and Recovery Act (RCRA)" – The public law creating the framework for the proper management of hazardous and non-hazardous solid waste.

4.23. "RCRA Facility Investigation (RFI)" – A thorough evaluation of the nature and extent of releases of hazardous waste and hazardous constituents at a facility that includes gathering necessary data to support the Corrective Measures Study and/or interim/stabilization measures.

- 4.24. "Site" – The geographical area where closure or corrective action activities are taking place. The site may consist of an entire facility or a single area of concern within the facility and may also extend beyond the facility.
- 4.25. "Solid waste management unit (SWMU)" – Any discernable unit, permitted or unpermitted, existing, or historical, at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the management of solid or hazardous waste. Such units include any area at a facility where routine and systematic releases of solid wastes occurred.
- 4.26. "Total closure or final closure" – The closure of all hazardous waste management units at the facility in accordance with the closure requirements of 40 CFR 264 and 40 CFR 265. After accepting closure certification, the owner or operator of the facility must still comply with all applicable generator requirements of 40 CFR 262 if newly generated waste is to remain on-site for less than ninety (90) days (40 CFR 262.34).
- 4.27. "Unconditional remediation objective" – A remediation objective which permits unrestricted use of a property. Examples include IDEM's published levels for residential exposure scenarios, naturally occurring background levels, or project-specific residential levels.

5.0 ROLES

- 5.1. The consultant shall:
- A. Represent the owner or operator in communications with IDEM regarding closure and/or corrective action requirements related to the facility.
 - B. Prepare closure plans, workplans, or other documents for a facility on behalf of the owner or operator.
 - C. Coordinate activities with the IDEM HWPS project manager to achieve closure of a HWMU.
 - D. Coordinate activities with the IDEM HWPS project manager to complete corrective action obligations at the site.
 - E. Submit plans, data, and documents as requested by the HWPS project manager.
 - F. Perform investigatory or remediation work as described in the closure plans, work plans, or other documents.
- 5.2. The IDEM attorney shall:
- A. Draft or review legal documents, other project related documents, and correspondence, as needed.
 - B. Advise IDEM OLQ project managers and IDEM management.
 - C. Refer cases to the Indiana Attorney General, when necessary.
- 5.3. The IDEM Permits Branch Chief shall:
- A. Approve documents such as letters to, and agreements with, owner/operator(s).
 - B. Assist HWPS chief in the resolution of issues which arise relative to a site, as needed.
- 5.4. The IDEM Science Services Branch staff shall:
- A. Provide expertise and services to the HWPS project managers in the fields of, but not limited to, chemistry, geology, geological information systems, engineering, and risk assessment.
 - B. Review closure plans, work plans, and reports.
 - C. Perform field oversight of investigation or remediation activities, as needed.
 - D. Provide sampling expertise.
 - E. Evaluate the quality of the environmental data.
 - F. Develop and maintain electronic databases (for contaminant tracking purposes).
 - G. Participate in meetings and discussions with facility owner/operator(s), consultants, or the public, as needed.
- 5.5. The IDEM HWPS Chief shall:
- A. Supervise program staff and ensure coordination among OLQ's other branches.
 - B. Approve documents such as letters to facility owner/operator(s) and agreements with facility owners or operators.
 - C. Assist in the resolution of issues which arise relative to a site, as needed.
- 5.6. The IDEM HWPS Project Manager shall:
- A. Coordinate and implement remediation activities with the facility owner or operator and the consultant.
 - B. Receive, evaluate, and provide comments on documents associated with the investigation, remediation, and closure of a site.
 - C. Prepare correspondence to the facility owner/operator and consultant communicating the status of the remediation project.
 - D. Request technical staff review of closure plans, work plans, and remediation documents; incorporate the technical staff suggestions and comments into the correspondence to the facility owner/operator and the consultant.
 - E. Conduct internal team meetings with technical staff to discuss the site.
 - F. Conduct meetings with the facility owner, operator, or the consultant to discuss approaches to the remediation or closure of a site.
 - G. Make decisions on the appropriate use of technology or remediation techniques at the site.

- H. Conduct site visits as requested or necessary to view the nuances of the site.
- I. Evaluate different proposals on their merit.
- 5.7. The facility owner or operator shall:
 - A. Prepare, or hire a consultant to prepare on its behalf, closure plans, investigation reports, remediation work plans, and progress reports to present to the HWPS project manager regarding the closure, characterization, and remediation of a site.
 - B. Respond to all HWPS project manager requests for information, in a timely manner.
 - C. Provide data, maps, or records to the HWPS project manager reflecting site conditions.

6.0 POLICY

- 6.1. OLQ's HWPS will provide oversight on RCRA closure and corrective action projects.
- 6.2. The HWPS will issue hazardous waste permits (operating, post-closure, or corrective action-only) to facilities for the treatment, storage, or disposal of hazardous waste, or corrective action activities related thereto.
- 6.3. The facility owner, operator, or consultant will prepare and submit closure plans and work plans; conduct investigations; perform interim measures and remediation, if unacceptable risk exists; and submit documentation of investigatory or remediation activities to the HWPS.
- 6.4. The HWPS may issue a Notice and Order of the Commissioner, pursuant to [IC 13-22-13](#). The HWPS may also seek a court order to compel a facility owner or operator to undertake investigation or remediation; to enter upon private or public property to conduct an appropriate response; or to recover costs and damages from an owner or operator.
- 6.5. HWPS staff will review closure plans and environmental investigation, remediation, and closure documentation; conduct site visits; attend meetings; coordinate technical reviews by OLQ Science Service Branch staff; and coordinate legal review and support by IDEM Office of Legal Counsel.
- 6.6. The HWPS will issue a Closure Certification Approval letter, upon review and acceptance of the Closure Certification Report for a HWMU.
- 6.7. The RCRA Closure and Corrective Action Program Guide (Effective NPD website) provides additional detail.

7.0 REFERENCES

- 7.1. Federal Laws or Rules:
 - A. 40 CFR Subchapter I Part 260 through Part 270 Solid and Hazardous Waste Regulations
- 7.2. Indiana Statutes:
 - A. [IC 13-22](#) Hazardous Waste Management
- 7.3. Indiana Administrative Codes:
 - A. [329 IAC 3.1](#) Hazardous Waste Permit Program and Related Hazardous Waste Management
- 7.4. Agency Policies:
 - A. Waste-0046-R2 Risk-based Closure Guide
 - B. Waste-0065 Procedures for Gaining Access to Third Party Properties by Responsible Parties Performing Remediation
 - C. Waste-0070 Community Involvement Plan

8.0 SIGNATURES

Brian C. Rockensuess, Commissioner
Indiana Department of Environmental Management

Date

Peggy Dorsey, Assistant Commissioner
Office of Land Quality

Date

Nancy King, General Counsel

Date

This policy is consistent with agency requirements.

James Bailey, Quality Assurance Section
Office of Program Support

Date

Posted: 12/21/2022 by Legislative Services Agency
An [html](#) version of this document.